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| APPLICATION NO.           | FILING DATE             | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |  |
|---------------------------|-------------------------|----------------------|---------------------|-----------------|--|
| 09/202,365                | 12/10/1998              | RONALD P. LUUTEN     | SZ997-003           | 2812            |  |
| 75                        | 590 02/27/2002          |                      |                     |                 |  |
| RONALD L DRUMHELLER       |                         |                      | EXAMINER            |                 |  |
| 94 TEAKETTL<br>MAHOPAC, N | E SPOUT ROAD<br>Y 10541 | •                    | NGUYEN, VAN KIM T   |                 |  |
|                           |                         |                      | ART UNIT            | PAPER NUMBER    |  |

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| _                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Application No.                                                                                                                                                                           | Applicant(s)                                                                                                                   | - B         |  |  |  |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------|--|--|--|
|                                                      | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 09/202,365                                                                                                                                                                                | LUIJTEN ET AL.                                                                                                                 | 1/          |  |  |  |
| -1                                                   | · Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Examiner                                                                                                                                                                                  | Art Unit                                                                                                                       |             |  |  |  |
| •'                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Van Kim T. Nguyen                                                                                                                                                                         | 2661                                                                                                                           |             |  |  |  |
|                                                      | - The MAILING DATE of this communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | appears on the cover sheet with                                                                                                                                                           | the correspondence addres                                                                                                      | s           |  |  |  |
| Period fo                                            | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                           | NTU(C) EDOM                                                                                                                    |             |  |  |  |
| THE I - Exter after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATIOn sions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory perion for reply with the set or extended period for reply will, by steply received by the Office later than three months after the moderate part of the maximum statutory. See 37 CFR 1.704(b). | N. R 1.136(a). In no event, however, may a repl reply within the statutory minimum of thirty (3 riod will apply and will expire SIX (6) MONTH atute, cause the application to become ABAN | y be timely filed  30) days will be considered timely.  S from the mailing date of this communition  IDONED (35 U.S.C. § 133). | nication,   |  |  |  |
| 1)🖂                                                  | Responsive to communication(s) filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 December 1998 .                                                                                                                                                                        |                                                                                                                                |             |  |  |  |
| 2a)□                                                 | This action is <b>FINAL</b> . 2b)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This action is non-final.                                                                                                                                                                 |                                                                                                                                |             |  |  |  |
| 3)□                                                  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| Dispositi                                            | on of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 4)🖂                                                  | Claim(s) 1-18 is/are pending in the applica                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | tion.                                                                                                                                                                                     |                                                                                                                                |             |  |  |  |
|                                                      | 4a) Of the above claim(s) is/are with                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | drawn from consideration.                                                                                                                                                                 |                                                                                                                                |             |  |  |  |
| 5)                                                   | Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 6)⊠                                                  | Claim(s) <u>1-18</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 7)                                                   | Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 8)                                                   | Claim(s) are subject to restriction an                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | d/or election requirement.                                                                                                                                                                |                                                                                                                                |             |  |  |  |
|                                                      | on Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ·                                                                                                                                                                                         |                                                                                                                                |             |  |  |  |
| 9)                                                   | The specification is objected to by the Exam                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | niner.                                                                                                                                                                                    |                                                                                                                                | ·           |  |  |  |
| 10)                                                  | rhe drawing(s) filed on is/are: a)□ a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ccepted or b) cojected to by the                                                                                                                                                          | Examiner.                                                                                                                      |             |  |  |  |
|                                                      | Applicant may not request that any objection to                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 11) 🔲 .                                              | The proposed drawing correction filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | is: a) ☐ approved b) ☐ dis                                                                                                                                                                | approved by the Examiner.                                                                                                      |             |  |  |  |
| İ                                                    | If approved, corrected drawings are required in                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | reply to this Office action.                                                                                                                                                              |                                                                                                                                |             |  |  |  |
| 12) 🔲                                                | The oath or declaration is objected to by the                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Examiner.                                                                                                                                                                                 |                                                                                                                                |             |  |  |  |
| Priority ι                                           | nder 35 U.S.C. §§ 119 and 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 13)🖂                                                 | Acknowledgment is made of a claim for for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | eign priority under 35 U.S.C. §                                                                                                                                                           | 119(a)-(d) or (f).                                                                                                             |             |  |  |  |
| a)                                                   | ☐ All b)☐ Some * c)⊠ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
|                                                      | 1. Certified copies of the priority docum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ents have been received.                                                                                                                                                                  |                                                                                                                                |             |  |  |  |
|                                                      | 2. Certified copies of the priority docum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                           | olication No                                                                                                                   |             |  |  |  |
|                                                      | 3. Copies of the certified copies of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | • •                                                                                                                                                                                       | <u> </u>                                                                                                                       | je          |  |  |  |
| * 5                                                  | application from the International ee the attached detailed Office action for a                                                                                                                                                                                                                                                                                                                                                                                                                                          | Bureau (PCT Rule 17.2(a)).                                                                                                                                                                |                                                                                                                                | ,-          |  |  |  |
| 14)□ A                                               | cknowledgment is made of a claim for dom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | estic priority under 35 U.S.C. §                                                                                                                                                          | 119(e) (to a provisional app                                                                                                   | olication). |  |  |  |
|                                                      | ) ☐ The translation of the foreign language<br>cknowledgment is made of a claim for dom                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| Attachmen                                            | c(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                           |                                                                                                                                |             |  |  |  |
| 2) Notice 3) Inform                                  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(                                                                                                                                                                                                                                                                                                                                                                                  | 5) Notice of Info                                                                                                                                                                         | mmary (PTO-413) Paper No(s)<br>ormal Patent Application (PTO-152                                                               |             |  |  |  |
| U.S. Patent and Te<br>PTO-326 (Re                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | e Action Summary                                                                                                                                                                          | Part of Pap                                                                                                                    | er No. 4    |  |  |  |

Art Unit: 2661

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, claim 1 recites the limitation "the used bandwidth," but there is insufficient antecedent basis for this limitation in the claim. Claim 1 also recites, "if the point of time (TS) when said duration (ET) was stored, is not longer ago than a predetermined threshold time interval (THR) at said arbitrary point of time (GT)." If TS is a point of time, it does not make sense to compare to THR, a predetermined threshold time interval for determining which one is longer. Similarly errors are found with claims 2-18.

Correction is required.

In order to examine the case, Examiner will interpret the claim 1 as "Method for determining a used bandwidth (CCR)... and, if the time interval between the point of time (TS) when said duration (ET) was stored and said arbitrary point of time (GT), is not longer ago than a predetermined threshold time interval (THR)." Similar interpretation also applied to claims 2-18.

Art Unit: 2661

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamato (US 5,889,761), in view of Mishra et al (US 5,805,599).

As shown on Figures 3-12, Yamato discloses a method and means for determining a used bandwidth (Current Cell Rate) on a plurality of connections (21, 23, or 22, Figure 4) on which countable information-carrying units (cells) are transported, characterized in that the duration of an arrival period during which a predetermined number of countable information-carrying units is measured (13, Figure 3) and stored (32, Figure 10), (columns 1-4, especially column 3, lines 59-67 and column 4, lines 1-9).

Yamato also discloses a storing means (41, Figure 8; 32, Figure 10) storing the point of time when the number of the arriving units reached a predetermined number M, and a determination means (13, 131, or 132, Figure 3; and 37, Figure 10) determining the arrival period using the point of time when the number of arriving units reached the predetermined number M and the point of time when the number of arriving units reached the predetermined number M previously (columns 5-11, especially column 6, lines 12-19).

Art Unit: 2661

Yamato also discloses a storing means for erasing or overwriting (37, Figure 10) the previous point of time, and the duration of the previous arrival period (columns 10-12, especially column 10, lines 17-67, and column 11, lines 1-9).

However, Yamato does not call for a predetermined threshold time interval (THR), or for it to be stored.

Yamato also does not call for a decision means using the point of time when the number of arriving units reached a predetermined number together with the arbitrary point of time and the predetermined threshold time interval to determine whether the stored duration at the arbitrary point of time is older or not older than the predetermined threshold interval.

Yamato also does not call for setting the used bandwidth at an arbitrary point of time to a predetermined number of countable information-carrying units if the time interval between the point of time when the duration was stored and the arbitrary point of time is not longer ago than a predetermined threshold time interval.

Yamato also does not call for measuring and storing the duration of the next arrival, and setting the used bandwidth to a predetermined number M of the units per the last-stored duration, if the time interval between the point of time when the last-stored duration was stored and the arbitrary point of time is not older than the predetermined threshold time interval.

As shown in Figure 1, Mishra teaches a predetermined threshold time interval (Switch\_Timeout\_Factor) and a storing means (50 or 70) to store it (column 8, lines 17-31).

Art Unit: 2661

Mishra also teaches a decision means (40, 50 or 60) using the point of time when the number of arriving units reached a predetermined number M together with the arbitrary point of time and the predetermined threshold time interval to determine whether the stored duration at the arbitrary point of time is older or not older than the predetermined threshold interval, and if it is not older, a definition means (40, 50 or 60) to set the used bandwidth at the arbitrary point of time to be a predetermined number of countable information-carrying units M (column 7-8, especially column 7, lines 1-52).

Mishra also teaches measuring and storing the duration of the next arrival, and setting the used bandwidth to a predetermined number M of the units per the last-stored duration, if the time interval between the point of time when the last-stored duration was stored and the arbitrary point of time is not older than the predetermined threshold time interval (columns 7-8, lines 1-31).

Although neither Yamato nor Mishra teaches setting the used bandwidth at an arbitrary point of time to be zero, if the time interval between the point of time when the arrival duration was stored and the arbitrary point of time is not older than the predetermined threshold time interval, Mishra does call for the used bandwidth to be set to the initial cell rate (ICR) in this case. Since ICR is just an arbitrary rate, it is obvious that it can be set to any value, e.g., zero.

Since it is highly desirable to fully utilize all available bandwidths in high-capacity networks such as ATM networks, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine Yamato's Method and System for

.. Art Unit: 2661

Controlling Cell Transmission Rate in ATM Network and Mishra's Adaptive Channel Allocation System to increase network efficiency.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Awdel et al (US 5,754,530), Flow Control of ABR Traffic in ATM Networks; Kalampoukas et al (US 5,675,576), Concestion Control System and Method for Packet Switched Networks Providing Max-Min Fairness; and Soumiya et al (US 5,696,764), ATM Exchange for Monitoring Congestion and Allocating and Transmitting Bandwidth Guaranteed and Non-Bandwidth-Guaranteed Connection Calls.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 703-305-7692. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703-305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

DAVID VINCENT PRIMARY EXAMINER

vtn

February 19, 2002